Webinar Transcript: District-Level Strategies to Advance Equity in Career and Technical Education Programs

Regional Educational Laboratory Central

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Overview

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Transcript

ANNE BUTTERWORTH: Hello, everybody. Welcome to our webinar on "District-Level Strategies to Advance Equity in Career and Technical Education Programs." We'll be getting started in just a minute or two as everyone gets in. OK. As we're entering, I'm going to go ahead and ask. There's going to be a poll that comes up on your screen. It would be great if you would share with us just your role in CTE. This helps us to understand who we have in the audience and gear our presentation to that.

MARC BRODERSEN: Great. Thank you, Anne. So today we're going to talk about equity in CTE. And why are we talking about this right now? So our interest in ensuring that students have equitable access to career and technical education stems in part from current and recent research showing positive student outcomes associated with CTE participation. So to get this thing started, I'm going to start by reviewing the results of a REL Central study that was recently published that examined the impact of CTE on postsecondary outcomes of students in Nebraska and South Dakota.

So the report can be found on IES web page. And I think, Anne, we just dropped a link in the chat. Resources developed for the report include a 15-page full report, the four-page brief, a one-page snapshot. We also created an infographic that provides a brief overview of the study results, and then the appendices provide more details on the study methodology that we used, detailed analysis results. And then the results-- the outcomes that we're going to talk about here combine data from Nebraska and South Dakota, but the appendices also include the results broken up for those two different states for those who were interested. If we can go to the next slide.

So for this study, we examined the impact of being a CTE concentrator on students' on-time high school graduation status, as well as their postsecondary enrollment and award attainment both two and five years after the expected high school graduation year. So here, a CTE concentrator is defined as a student who earns multiple credits online to a specific career field.

The study sample included students in Nebraska and South Dakota whose high school graduation year was between 2012-13 and 2016-17. Our CTE concentrators were matched with non-CTE concentrators based on their eighth grade demographic characteristics and academic achievement. Since for this study we're characterizing CTE primarily being a high school program, this matching was essential to control for selection bias or factors that might influence whether a student decides it's going to CTE concentrator or not, as well as factors that might influence their later postsecondary success.

You can see that our final sample included over 110,000 students, and that CTE concentrators and non-concentrators were statistically similar on the baseline characteristics. This gives us more confidence that we can attribute any differences between the groups on the study outcomes as being due to their CTE concentrator status. So now I'm going to go over the study results. All righty.

So here you can see that CTE concentrators for more likely than non-CTE concentrators to graduate from high school on time with a difference of 98% versus 85%. And it's important to note that the numbers we're presenting here are-- this is just the raw percentages. So of all of this CTE concentrators in our sample, 98% of them graduate high school on time.

When we actually get the impact analysis, the statistical analysis where we included the baseline characteristics and all the controls, the analysis is different. It looks at differences in the likelihood or percentage likelihood of achieving this outcome. And here we found in the impact analysis that our CTE concentrators were actually 7 percentage points more likely to graduate on time. And because of the controls and stuff, those numbers-- the 7% obviously doesn't add up to the difference between-- there's two different ways of looking at the data. We can go to the next one.

So here we see CTE concentrators we're also more likely to enroll in postsecondary education, both within two years and five years of high school. And that enrollment includes some kind of a professional certificate, being in a diploma-granting program, or a two or four-year institution. And when we did our impact analysis, we found that our CTE concentrators were actually 10 percentage points and 8 percentage points more likely to enroll than some kind of postsecondary education within two and five years.

Additional analyses we've looked at also found them to be more likely to be enrolled-- CTE concentrators would be more likely to be enrolled full-time and to be enrolled at both a two and a four-year institution two years after high school. At five years after high school they were more likely to be enrolled in a two-year institution and equally as likely to be enrolled in a four-year institution. We can go to the next slide.

OK. Now when we're looking at attaining a postsecondary award within two years and five years, we see that our CTE concentrators were more likely to attain a postsecondary award at both of those points in time. This includes some kind of a professional certificate, a diploma like a one-year type of a diploma, an associate's degree, bachelor's degree, or graduate degree. And so in our impact analysis, this translates into our CTE concentrators having a 2 or 3 percentage point greater likelihood of attaining any type of award.

So at five years post-high school, we'll also look at the type of postsecondary where students earned as their highest degree or terminal work. Here you can see that our CTE concentrators were more likely to earn up to an associates degree at their highest award, while they're slightly less likely to earn a bachelor's degree or higher. The impact analysis, the CTE concentrators were 4 percentage points more likely to earn up to an associate's degree and one percentage point less likely to earn a bachelor's degree or higher than non-CTE concentrators.

So taking all the study findings together, we show that CTE concentrators have better educational outcomes in the short-term and are on par of doing slightly better than our non-CTE concentrators in the long-term. And these findings align with those of several other recent studies that I'm going to go over here next.

So Arneson and Dougherty, similar with our study, have shown that CTE concentrators to be more likely to graduate from high school and have similar or somewhat better postsecondary outcomes than non-CTE concentrators. And unfortunately for our study, we were unable to include workforce outcomes in our study. It's something we were really hoping to do and it just was not possible given data infrastructure or whatnot at the time.

However, these two studies did show that CTE concentrators have similar or better employment rates, and they have higher wages than non-CTE concentrators in both the short and the long-term. And so it's this emerging evidence of positive impacts of CTE participation is why we're here today and why we are working towards supporting equitable access for all students. So thank you, and I think I go back to Anne now.

ANNE BUTTERWORTH: Yes. Thank you, Marc, very much. And we are going to move on and look a little bit deeper into some of these numbers, and a call for action that has been published from Advance CTE. So before I do that, I want to go ahead and pause and remind you if you have any questions, please take a moment to post them in the question-- or the Q&A box so we can answer them. I do see one from Gerin, and I think we're going to look at some of those numbers here in a second.

So with a growing pool of evidence that participating in CTE results in positive outcomes for students-- sorry, let me go back. It has become increasingly urgent that we ensure all students, regardless of their background and life situations, have had an opportunity and the support needed to participate and succeed in CTE programs.

With the understanding, Advance CTE put out this vision in March. They put out a call for action for education and workforce assistance to come together to build a more cohesive,

flexible, and responsive career preparation ecosystem with CTE programs as the bond to pull these established systems together and leverage their greatest assets.

This vision pushes a new model of collaboration, learner-centric design, and delivery. Funding and accountability that create the right incentives and support. The vision document clearly states that only through shared commitment and shared ownership among leaders and practitioners at all levels can we realize the possibility and aspiration of a new career preparation ecosystem that prepares each learner with limited opportunity—limitless opportunity. So a big call to action.

And then they broke it down into five principles that need to be examined, redesigned, and some rebuilt. So the first principle is that each learner engages in a cohesive, flexible, responsible-responsive career preparation ecosystem. The second one talks about each learner feeling welcome and being supported to succeed. The third principle is that support is given so each learner can skillfully navigate their own career journey. And the fourth one is that all learner skills are counted, valued, and affordable. And the fifth principle is that they all-- every student has access to CTE without borders.

These five principles are built upon a foundational set of foundational commitments or non-negotiables that have to be in place in a community to make these principles happen. So you can see the five foundational commitments here, including continuous improvement and collaboration, actionable data, meaningful public/private partnerships, quality programs and instructors, and equity. Equity is the one we're going to highly focus on today, but I think you're going to see a lot of these other principles demonstrated through our school districts in the actions that they're taking.

So how is equity defined in CTE programs? Equity is defined as all dimensions of equity including educational, racial, socioeconomic, gender, and geographic, and meeting the needs of each individual learner. So that is the goal of achieving equity and we're pleased today to be joined by school district leaders will share some ways that their school districts are working to ensure that this equity programming is happening in their CTE programs.

Before we do that, let's look a little bit at the numbers. So here's a breakdown of CTE participants by ethnicity, by gender, special education services, and second language. While the gap on this graph may seem somewhat negligible, the impact is compounded when groups of students that have shown the highest need for increased support in the areas of accessing highwage careers and succeeding in postsecondary learning environments are participating less than groups that have traditionally been more successful.

This becomes even more pronounced when you look at CTE concentrators. So the very first graph was just CTE participants. When you move into CTE concentrators, which is where most of the impact studies are showing the benefits, you can see that there is a greater decrease in those populations' participation in the program, which is something we'd all like to work towards increasing those participations.

I'm going to go ahead and put up another poll for you. And just kind of asking you to reflect on where your organization is and its CTE program equity journey. We all know this is a journey,

it's not a light switch, it's not a one thing to do and then be done. So you're maybe at the, we have yet to get started, or we are getting started, we're well underway, we're working on sustainability, or it's here for good and we're confident that it will go nowhere. I mean, it will take us everywhere, but it will not go away.

So we'll just go ahead and answer that poll as our leaders talk about their school districts, and then we'll look at that poll after that. So I am going to turn it over to Jolene to tell us a little bit about the Huron School District in South Dakota

JOLENE KONECHNE: Good morning, afternoon, depending on where you're at. I'm Jolene Konechne with the Huron School District. My title is Director of ESL, CTE, Federal Programs, and Accreditation. So I have a mix of positions. I'm supported by a great team of administrators, faculty, and staff, along with community partners that allow us to focus on our students.

As you can see by the graphic on the screen, we have a very diverse population. Our population of 2,807 students, 44% of our population is Caucasian while the rest are of other ethnicities. The wonderful thing about our district is our motto is We Are Huron. And what that is we embrace everyone that comes in and we don't have a lot of the struggles that a lot of other districts have. Within this 2,807 students, 920 of them approximately are ESL students. So next slide, please.

ANNE BUTTERWORTH: Thank you. I think we're going to go to Rapid City, and then we'll come back to the rest of the districts. So I'll turn it over to Dr. Simon.

LORI SIMON: Hi, everyone. Good to be with you. Just a high-level overview of the makeup of our district. We have just under 13,000 students. And you can see the demographics broken down there on the screen. About 66% white. Between the multiracial in the American Indian, about a third of our students are Native American. And then much smaller numbers in our Asian, Pacific Islander, Black, and Latina/Latino students.

We have about 2,000 staff with 23 schools consisting of 15 elementary schools, five middle schools, two comprehensive high schools, and one alternative high school. We have about 45% of our students considered in poverty or qualifying for free and reduced lunch. And then when we look at some of the indicators on our state report card, in terms of that CTE concentrator status marker, about 54% of our students are considered coursework-ready.

ANNE BUTTERWORTH: Thank you. And I'll turn it over to Jan Osborn from Portland.

JAN OSBORN: Good morning, afternoon. I'm Jan Osborn, I'm the Director of Career and Technical Education and Career Learning at Portland Public Schools in Portland, Oregon. We're a district that's just a little under 50,000 students. We're the largest school district in Oregon. We have a number of schools in our system, including 10 high schools, eight CBOs, and one K-12 where we have CTE programming.

We are a very white district, and so intentionally really focusing on our students and families of color. And also a focal area is on our students who are experiencing mobility. And in 19-20, over 26% of our students were experiencing homelessness, and really moving between our different campuses. And so really trying to focus on how we support them to have great experiences no matter which campus they might be attending. Thank you.

ANNE BUTTERWORTH: Thank you. So as you can see, we have a wide range of districts here for everybody to connect with, and hopefully you'll find some similarities where you're working as well. And let's go ahead and share the results of the poll. And there we go.

So we have a couple of people that have yet to begin the journey in their organization, which is a great place to be, because there is a lot of opportunities there. There's a lot of people getting started and underway way and working on sustainability, and a few people that could be some experts in the room to help us answer-- provide other input on what's going well, because they have it figured out dialed in in their area, so great job.

We're going to now go and allow each of these leaders to have a little more time to explain the strategies that they're using and some of the challenges that they have overcome. And continue to put those questions and answers into-- or questions into the chat box or into the Q&A, and we'll be addressing those as we go along. So Jolene, I'll pass it over to you.

JOLENE KONECHNE: OK. So the very unique thing about our district-- and I believe we're the only one in South Dakota that does that-- is we no longer have different K-5 elementary buildings within the district. We have moved to attendance centers. So our kindergarten and first grade are in one building, second and third grade in another building, fourth and fifth grade in another building, and then sixth through eighth or at the middle school, and nine through 12 are at the high school.

What that has done it is it has kind of taken away any socioeconomic status that the student might have. And I was just speaking with the teacher this morning at summer school and she said, when I was going to school, I would come back during the weekends and work at a local gas station, and I overheard a realtor talking to someone that was coming into the district. And she-- the realtor was female and she said, you do not want to live here, here, or here because then your child would have to attend this lower economic school.

And so we have taken those barriers out for our students, K-5, and allowed them to be a whole group. And it has been-this has been probably about four or five years, and it has been absolutely phenomenal for our teachers, for our students, for our community. And so that is something that we are very, very proud of and happy that that change got made.

Some of the challenges that we have faced in past years is the general student population of male-female enrollment versus the CTE male-female enrollment. Really trying to get those

nontraditional students into those career clusters and allow them to be concentrators. We just did a survey last year of our parents and-- oops.

ANNE BUTTERWORTH: Oops, sorry.

JOLENE KONECHNE: And we want to help the parents, students, and community understand our programs a little bit better. And so one of the things that we're going to do is work with a videographer here in town and work with alumni and current students and community members, get some videos put together showcasing various career clusters and start airing them on our local news-- or TV channel, on our Facebook, use social media to help promote that.

A lot of kids are in CTE classes, but they don't realize that they're in a CTE class. So really working on using that vocabulary with our students, our parents, and our community.

Another thing that we will be doing is-- a challenge is trying to create a greater awareness of career opportunities within CTE. Last year was our first year in fully implementing Project Lead the Way launch, K through 5. And so that will help, we believe, our students be able to start thinking about different careers and pathways and allow them to think outside of the box. Oh, I never thought about doing this or I didn't think girls or I didn't think boys could do this profession.

So opening up that thought box and having open communication and exploration time for the students about where they want to go. We will be hosting a middle school construction camp next summer, I think. We're currently breaking ground for an addition to our CTE center July 6. And if that is finished in time for a middle school construction camp, we will start next summer. If not, it'll be the summer of 2023.

But that will allow students to get some experience so they're maybe not so intimidated by power tools or the building trades class, and allow them to start thinking, oh, maybe I can do that. And then in our senior homerooms starting next year in the 21-22, we're going to really focus on workforce development for those students and allow them to really dive into the profession and focus on what standards the state has set for digging into that.

And so it'll be a trial run. If it works well, we'll take it next year to both juniors and seniors and broaden those opportunities for students to use time during the school day to go out and explore different careers and meet with community partners and start building those relationships to strengthen our program.

ANNE BUTTERWORTH: Great. Thank you very much. We do have one follow-up question that I want to ask, and I'm going to put this out to all of the panelists to share very quickly. So the question is, in what other ways are you reaching out to parents about the benefits and advantages of CTE? Are you, with consideration of COVID able to or having live opportunities to share CTE with parents or PTA meetings? What other ways are you communicating the advantages of CTE to parents? And I'll start-- Jan, do you have any thoughts on that?

JAN OSBORN: Sure. We had some-- normally they're in-person, our eighth grade information night. And we're there with materials that we have, and we make sure that they are translated and also not heavy with text, but more pictographic of CTE opportunities at the feeder high schools.

This year we had a virtual situation for that. Not as good as the in-person, but we still got to meet a lot of families and talk about CTE and preparation of going into high school, but I think it's a continual conversation with families to understand that it has changed, that it's different than it was in the past, and it really does expose students to a number of opportunities and pathways.

ANNE BUTTERWORTH: Thank you. Dr. Simon, anything to add about your district's approach to communicating with parents?

LORI SIMON: Sure, thank you. So we take a similar approach in what Jan described, beginning at the eighth grade level, as we bring in students and families to prepare them and give them information about the high school experience and our academy model, which I'll talk about shortly. But then at the high school level, too, our high schools do a lot of work with parents in different ways. They'll have different college and career fairs, they'll have academy information nights where parents have the opportunity to come in and talk directly with school staff about our academy model and what those CTE courses look like within the pathways within our model.

ANNE BUTTERWORTH: All right. Jolene, thank you for sharing and kicking off our discussion on parents, and I will turn it over to Dr. Simon to talk a little bit more about Rapid City's approaches.

MARC BRODERSEN: And I do want to say, I recognize we have some questions coming in for the Q&A. And we will try to address those once we're done with the presentation. So we will get to them.

LORI SIMON: OK, so as I get started here, the way that we're approaching equity in CTE is to look at it through the lens of equity and access for all students, and that's just going to be embedded within our model, which I'm going to talk about today.

So we have five pillars within our current strategic plan, and pillar 3 is all around expanding opportunities for college and career exploration, and enrichment, again, for all students. And so when we think about our key priorities and strategies underneath this pillar, it is about graduation expectations aligned with higher education and our local work force development needs.

And then really creating a college and career-ready culture of high expectations and equitable access and exposure, as well as multiple pathways and opportunities for all students.

So we have engaged heavily with our business, our non-profit, and our higher ed community, as well as our students themselves to understand the challenges that we face. So challenge number one is that most young adults really lack the career knowledge and career navigation skills, and that just turns into other challenges. And we know from our exit senior survey, which we actually just completed, that less than 50% of our seniors reported that their classes prepared them for college and career. And even fewer, about 45% felt that they received sufficient college and career support in our survey that they just completed.

We also know from our data that too many young adults drift in and out of postsecondary education and training, and many don't even complete any kind of degree or program. We know from engaging with our local and regional workforce that there is a serious mismatch between the good skilled career jobs that are available and then students that have the right skills and credentials for those jobs. And this hits really all areas of our community, everything from health care to the auto industry to our construction industry, it really is broad and far-reaching. And finally, we know that many youth and young adults have just given up and disengaged and disconnect from both work and learning.

So our response is really, again, this very comprehensive approach. And while it's a K-12, approach I'm going to focus on what we are doing specifically in grades eight through 12. And so we use the word college very broadly and really look at it being any sort of educational training opportunity beyond high school. So it may involve a credential, a certificate, service in the military, a one-year or two-year or four-year degree program.

And when we think about college career and life-ready, we want students to be prepared for some sort of education and training beyond high school. We want them to not only know how to read, write, understand mathematics, science, social studies, we also want to make sure that they have those important 21st century or employability skills that we hear directly from our industry partners. Students need to be able to communicate very well orally and in writing. They need problem-solvers, they need critical thinkers.

We also want to make sure that our students are equipped to navigate a meaningful career as they begin their adult life. And lastly, we want all of our high school students to graduate with a career action plan for the first year beyond high school.

And so at the eighth grade level, our work really consists of two key components. All eighth graders take a career exploration class in which higher ed, business, and industry partners come in and talk with students, engage in Q&A with them. They have the opportunity to listen to career panels, and they learn a little bit about our Rapid City High School Career Academies.

All eighth graders also attend an eighth grade college and career fair that it's held every November. This year due to COVID, we had to do it very differently, and so we put together a virtual college and career fair. But you can see at the bottom of the screen the four areas in which students were able to engage. They listen to pretaped career panels by many of our business and industry partners, they actually had a chance to engage virtually with those partners, they learned about our high school career academy model, and they also attended specific workshops that were of interest to them.

So after eighth grade, all students go into our freshman academy, and this school year was our inaugural freshman class entering our freshman academy. I'm going to talk about that in a little bit. And then from there, each student will matriculate into an academy of their choice, and you see our academies listed there. One is around business entrepreneurship and hospitality, computer arts and sciences, construction and technical trades, health services, human services and education, and science and engineering.

We're really looking and describing an academy as a small learning community that contains one or more pathways within it. And a pathway is really those courses that are offered in an aligned way within that academy that a student does choose, and I'm going to walk you through our model here shortly. Oops.

So beginning at the freshman academy level this year, again, was our inaugural year at both of our comprehensive high schools. We do open up this opportunity to any students attending our alternative high school. They do so by virtually attending our courses or just actually spending part of their day within their area high school.

So of course, they take their four core classes. They have plenty of opportunity for elective exploration. And then within the academy credits, they take a half-credit of a computer applications course that's front-loaded so that they have the tech skills that they need to be successful. They take a quarter credit of GRADtime, and I'll talk about that shortly. And then the other half-credit course is freshman seminar.

In freshman seminar they learn about our academies, they go on industry tours, they have panels, come in and talk and interact with them. They learn study skills, test-taking skills, other students success skills, and they also learn some important digital citizenship skills. GRADtime is offered eight times a year and it is through an and advisory schedule that's set on those days eight times a year. It's really about graduation readiness, advising, and direction that's coming directly from our high school counselors, and students are working on the content eight times a year on an online learning platform at their own pace.

So once students go to 10th grade, they opt into the academy area of their choice. And so each of our six academies has an introductory course with one caveat, and that's our science and engineering academy. Because we are a huge agriculture and natural resources area here out in the Black Hills, we have two academy introductory courses, the Intro to Ag, Food, and Natural Resources, and then the Intro to Science and Engineering.

Now if it's not a good fit, at the end of 10th grade, a student can decide, then at 11th grade, rather than go to a pathway within the academy, they can try out another academy. We're all about providing students choice within this model. If it is a good fit, however, then they will decide which pathway within that academy that they want to matriculate into. And I should note that both the academy introductory course and the pathway foundational course are both state-certified CTE courses. And so by taking these two courses within our state, then they reach that CTE concentrator status. Pathway courses really take kids more deep into a specific area specific career areas within that broader academy.

And then really, the sky is the limit for our seniors. We're really looking at that as a capstone experience year or an opportunity for partaking something more specialized within that pathway, whether it's more CTE courses, attending one of our partnering colleges and universities to take dual enrollment, it could be advanced placement, it could be working on specific industry certifications, it could be an opportunity for a job or a work-based learning experience.

I talked about our heavy engagement, and our community has really stepped up to support our academy model. And so every year we track through a dashboard, and you see, even despite the challenges of a COVID year and having to do a lot of virtual engagement, our partners really stepped up and still did increase at the end of this school year. We have 111 business and industry partners that are offering a range of opportunities for students and supporting us in a number of ways.

As we think about our model, we look at it as really benefiting everybody in our community, certainly beginning with our students. We're trying to make our programming more relevant through interdisciplinary project-based learning. We want them to be better prepared for college career and life. And we want them to leave us with the confidence for some real-world experiences. And at the end of the day, we want them to graduate with a plan for year one.

And hopefully they've had enough exposure so that they either know, A, what they want to do and explore more beyond high school, and even just as importantly, what they don't want to do. Certainly for the families, it's a benefit to them if their students have more opportunity for exploration exposure in high school, more knowledge. And it helps families make a smarter financial investment in those decisions regarding some sort of postsecondary degree beyond high school for their children.

Certainly we see it as a benefit for our employers. At the end of the day, we hope that they are going to be better engaged. There's going to be lots of opportunities to support and mentor students, and that they're going to have access to a better prepared workforce. Which then, in turn, benefits our community that will have a better match between skilled workers and all of the careers that exist in jobs that go unfilled. That we'll have stronger families and neighborhoods through stronger school and community collaboration, as well as workforce development partnerships.

And as I close, this last slide just shows that our business community really has stepped up to support fiscally and in other ways each one of our academies. So we have a fiscal sponsor for each one of our academies, and they have made a long-term five-year financial commitment to sponsoring and supporting our work with our students.

ANNE BUTTERWORTH: Thank you so much for sharing. I think this is a great example of building a system from ground-up to address the needs that are discussed in the CTE Without Limits vision. I also want to take a moment to pause and talk about one of the questions-actually combine two of the questions that are in the chat box. And Jolene, I'm going to start with you so you have fair warning.

So there's a lot of-- there's two questions discussing moderate and complex disabilities, and both talking about, A, do you let students with disabilities participate in the program? And then how do you accommodate them? And you guys are designing facilities, so what do your facilities look like for that? And then how are you ensuring that that is happening and that those students aren't being overlooked?

JOLENE KONECHNE: We allow any student to register for any class that they choose. All of our facilities are handicap-accessible. We have several students with disabilities that have taken different CTE classes. I can't say in my tenure here that we've had any students with disabilities take welding or auto, but we will certainly make those accommodations if that was something that they wanted to do, and we would find a way to make it work.

As far as any modifications or accommodations of the content, they learn all of the information in the classroom right along the rest of their peers. Meet any needs of their IEP, any accommodations or modifications of tests. And the same goes for ESL students with LAPs. Meet those accommodations and modifications. So students know that they are able to register for any class that they want. We do not hold anything-- and yeah, it's exciting.

ANNE BUTTERWORTH: Great. Thank you. Dr. Simon, do you have anything to add about students with disabilities and facility access and data ensuring their participation.

LORI SIMON: Yes. So again, our model is intended to provide access and equity for all students, and that includes our students with disabilities. And so as we look at our freshman seminar in our academy courses, et cetera, our pathway courses, all of our special education students will matriculate through our model, of course, with the appropriate supports and interventions per their individualized education plans.

Within our Human Services and Education Academy, we do have a Life and Workplace Readiness pathway that is specific for students with moderate to significant cognitive disabilities, and really is designed to expand their knowledge and skills in the areas of social skill development, independent community living, communication, and workplace readiness. And our expectation is that students in this pathway will participate to the extent possible given their individual needs.

ANNE BUTTERWORTH: Great. Thank you. And Jan, I'm going to give you an opportunity to respond, and then go right into your presentation. And I do see some question and answers possibly-- Dr. Simon, of course-- specifically for academies, maybe you can answer those in the question and answer with the typing. Jan?

JAN OSBORN: Sure. I would agree with everything that Jolene and Dr. Simon just said. We also are in the process of modernizing our schools, which has really helped us purposely think

about students with disabilities and how can they interact in the auto shop and welding shops, some examples, comfortably, and that we have machines that adjust for them if they need it. Really being intentional about the design of new spaces.

We also are designing for students who have experienced trauma. So what kind of materials do we use inside and what colors do we think about so that their experience inside the building is positive and more accessible for them than some of our older buildings? So those are some ways that we're doing some additional accommodations for students.

ANNE BUTTERWORTH: Thank you.

JAN OSBORN: Portland Public Schools, just a little bit of background. About eight years ago, we had like 19 programs of study and 20 CTE teachers. We started to see the data coming in, that CTE concentrators were graduating at much higher rates than our average non-CTE student, and we really started to push developing CTE programs across our high school system.

We had four high schools that had no CTE on their campuses at that time, and now we have 71 programs of study, 14 career clusters represented across the district, over 100 CTE teachers at eight of our comprehensive high schools and three of our alternative education high school sites.

We have been working on our theory of action here at Portland Public Schools, really on creating the vision for what our North Star is. And so we've used this theory of action to reimagine Portland Public Schools over the last couple of years. And had hundreds of stakeholder sessions in the community and received thousands of pieces of data to create our Portland Public Schools vision for our graduates, our educators, and our system, and what needs to happen to really create equitable opportunities, especially for our Black and Native American students to realize our graduate portrait.

And our vision is a graduate of Portland Public Schools will be a compassionate critical thinker able to collaborate and solve problems and be prepared to lead a more socially just world. And this is really our North Star as we move forward with any programming work within CTE and PPS. This is our Nine Elements of our Graduate Profile. When we look at programming, not only do we look at the partner that we want to bring in, but also what part of the graduate profile is this hitting? What kind of experiences is creating for our students to be able to move forward towards this graduate profile? And also, how will it fit into our equity—our racial equity and social justice work?

We also have nine educator essentials. So anyone who works for Portland Public Schools is an educator, and we want them to embrace these essentials as they work with our students within our system to help us embrace our students and really get them to that graduate profile. And then we have our racial equity and social justice lens. And it's a process of looking at programming partners to really ensure that we're making appropriate choices for our students and communities of color. We'll put the link in so you can see the actual questioning that we go through when we have that.

We go through the process, for example-- we had Wells Fargo come to us not too long ago and really wanted to work with a business CTE program. As we put them through our lens, we realized that they really have had negative impact on our communities of color with some unethical practices in banking and mortgage lending.

And so when we went to the teacher, we had a very long discussion about how we might be able to work with them. And we talked with the students, and they really wanted to have a talk about ethical banking practices. So we went back and talked with Wells Fargo to let them know it was going to be a difficult conversation, but one that our students really wanted to have with them about their choices of that whole Wells Fargo system and how it affected communities of color.

And then also been targeting down to that particular bank and then how that they were affected by the more national implications of the decisions of the Wells Fargo banking system.

So it really has this take a look at who we're bringing in and putting in front of students and asking the right questions to make sure we're ensuring that we're thinking about all of our students when we're bringing in partners to be in front of them. And then one of the other things about our social justice lens, we know that our CTE students of color are not persisting through and completing the program of study as our white students.

And more they're just kind of picking and choosing. And so really having conversations with families, as Jolene and Dr. Simon were talking about earlier, about understanding what CTE is now and to kind of dismantle the distrust of CTE when historically we have tracked students of color into CTE, and really understanding the what CTE is now and the opportunities and rigorous experiences that it can provide for all of our students at Portland Public.

This year with COVID, and in fact, in March 2020 with the shutdown, we started to do a lot of virtual career learning experiences. Future You 2 Go is what we launched in March of 2020 right after the shutdown, and these were 45-minute virtual sessions of career presentations. We partner with Portland Community College and talked about all the postsecondary opportunities that were there with them, teaching skills like knife skills with a chef, informational interviews, and we even did industry tours.

It was very successful, and we served over 4,000 high school students this year doing Future You 2 Go on one of our asynchronous days when they did not have to be on the computer for live classes.

We also created Virtual Academies, really having deep experiences with industry partners. These were multiple-week sessions where we aligned a lot of career readiness experiences with those professionals and then deeper understanding of the career pathways within their-- like we had in nursing academy.

These were really successful this year. Students came back each week. It was very exciting. One of the things we noticed with virtual learning, it's much easier for our industry partners to participate. And so we know moving forward, we will do some sort of version of this. We also put together a college and career readiness experience on PSAT Day, and we had over 10,000 of

our 15,000 high school students participate in career readiness workshops, postsecondary opportunities, and FAFSA and pieces of that.

So we're really excited what we learned this year from virtual learning as far as career learning and CCR happened, and we will definitely take some pieces forward into the future when we are back in person. And at Portland Public Schools about three years ago, we developed a career learning data system and partnership system called Partner Connect. What this has done is-- we have over 700 partners in the system. It's really like a warm Rolodex for our high school career coordinators, and really gives us an opportunity to make sure that the partners that we're bringing in reflect our students who are in front of us so that they can see themselves in the future with all of these presentations and opportunities that we're doing.

It also gives this career learning data, which we hadn't had before. So who is and who is not participating in our career learning experiences? And we're also developing data for the CTE programs as well. So this is just from Future You 2 Go that we had from March to June of last year. And we can look at who participated and really study that and see-- we see right there, our white students participated at much higher rates than our students of color, especially our Black students and our Latino students.

And so we really set up strategies over the summer of how are we going to target community organizations that might support these families, alliance and affinity groups for these students that are happening at the schools, and really connecting with those advisors and doing social media campaigns to those groups to try to increase the participation over the school year.

We can also break it down-- this is my grade level if he participated. We can also do it by gender. And this has been really a great piece for us to have on-the-go data, not waiting a year to get it from the state to be able to make some decisions. And also make-- change direction if something wasn't working correctly.

Excuse me. And lastly, we've developed a college and career readiness pathways master plan. This looks very similar to what Dr. Simon's district is doing. We're one of a handful of districts that received a federal Perkins Innovation Grant where we are really trying to make more relevant connections between core and CTE by setting up college and career readiness pathways.

We also have ninth grade communities for our ninth grade students, and that is small communities that cohort together so that our teachers are sharing students. And then also giving our teachers planning time to be able to talk about the students, to be able to reach out to those families and really communicate with them about how their ninth graders are doing, and then moving them into more focused themed pathways, and really starting to focus on multidisciplinary project-based learning throughout our high school system, and actually looking at project-based learning through our K-8 system as well.

ANNE BUTTERWORTH: All right. Thank you, Jan, for sharing how you use data. I think that was a question that had been in there from the beginning, so I'm glad you were able to address that. And also, I saw a question in there about recruiting STEM teachers, and thank you for Jolene and Dr. Simon for answering that question. I know it's on everybody's mind.

We are in our last two minutes. And I want to go ahead and talk about, is there any special training or professional development opportunities you're offering to CTE teachers so that they are able to differentiate instruction, be trauma-informed, be culturally sensitive, especially knowing that there's some-- CTE has the alternative pathways, so some of those teachers have not gone through education programs right upfront. And so I was going to ask if there's any special opportunities or professional development that is provided for educators.

LORI SIMON: Annie, I can jump in really quickly. All of our teachers are going through some level of trauma-informed professional development. And so that is just woven into our annual professional development model. Some of it is offered virtually, some of it is done in-person with our trainers in our district staff, but we're taking a fairly comprehensive approach there.

Also, in the area of dyslexia, we have all of our teachers every year engaged in the next level of really understanding how to support students with dyslexia and other reading difficulties or disabilities.

ANNE BUTTERWORTH: Great. Thank you so much. Jan, do you have a 30-second answer of anything special from your district?

JAN OSBORN: Yes. We are doing a focus on culturally sustaining strategies. We've brought in Dr. Bettina Love and others to really help all teachers think about culturally sustaining strategies. And we're also doing professional development around virtual bridge visits, but really continuous communication with families, positive-- positive communication about what your students' aspirations and dreams, not that it's a call to say, hey, your kid was acting up in class. But really trying to create that positive interaction between families and teachers.

ANNE BUTTERWORTH: Thank you. Well, thank you to all our presenters today. We acknowledge at REL, this is a small drop in a very big bucket on equity across education and especially in CTE. But welcome all your questions and comments. Please reach out if there's anything further we can do.

We do have an Ask a REL if you want to use Ask a REL to ask about some research background data. You can find that online, and we will answer those questions for you.

So thank you very much. Enjoy the rest of your afternoon, and thank you for joining us today.